

Tricks relieve hard-disk bottleneck

Your computer's hard disk allows you to run complicated programs and store vast amounts of data. It is also the most common bottleneck to better performance on a PC.

Regardless of your PC's vintage, a little organization and a trick or two will make this component operate at peak performance:

- **Create more subdirectories.** A good directory system makes you and your computer more efficient.

While it is mainly human efficiency that improves from orderly directories, you'll be pleasantly surprised to see how many of your operations speed up through this simple action.

- **"Unfragment" your files.** One consequence of heavy usage on a hard disk is the more you use it to add, delete or edit files the more inefficient it becomes.

The time it takes to read and write data slowly increases as the operating system breaks up files to



Hillel Segal

fit them in a available spaces on the disk.

There are a number of commercial programs that will rewrite files as contiguous blocks.

You can accomplish the same task,

however, without the cost of an additional program:

- **Carefully back up your hard disk to floppies.** Make two complete sets of backups to be double safe before proceeding with this operation.

- **Reformat your hard disk,** while being sure to include system files.

- **Recopy all your files from the backup floppies.** It takes a bit of effort, but when you're through

you have a hard disk that's both backed up and more efficient.

- **Archive unused files.** Despite its typically large size, it doesn't take long to fill up a hard disk with outdated files.

Back up unused files often to floppy disks and then delete them from your hard disk. PC Librarian is an excellent tool for bumping files off your hard disk and onto floppies. Its cataloging system makes the retrieval of infrequently used files a breeze.

- **Put often-used files in a RAM disk.** A hard disk's relative slowness comes about because it relies on slow mechanical processes.

An alternative is to create an electronic disk using part of your computer's memory. Once done, your access times will fly.

The big caution with RAM disks, however, is that they are completely erased when the power is off, so you must back up to your physical disk frequently.

- **Check your "config.sys" file.** If you don't have such a file in your root directory, you're handicapping the performance of your computer.

This tiny file contains performance settings that will have a big impact on your programs. While your operating system manual will recommend minimum settings, many programs require different — usually higher — numbers.

- **The Bottom Line:** A few years ago a hard disk was an expensive, exotic luxury. Today, it's rare to find a PC without one.

While there are many commercial programs that promise to optimize your hard disk's performance, you should investigate these no-cost steps first.

Hillel Segal's weekly column evaluates gadgets, small-computer hardware and software, seminars and books designed to enhance business productivity.